## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

**ORDER NO. 95-176** 

REVISED WASTE DISCHARGE REQUIREMENTS FOR:

CITY OF MARTINEZ CITY OF MARTINEZ MARINA SEDIMENT DISPOSAL SITE CONTRA COSTA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter referred to as the Regional Board, finds that:

- 1. The City of Martinez (hereinafter referred to as the Discharger) submitted a request for revision of their Waste Discharge Requirements, dated July 17, 1995, to include receiving approximately 20,000 cubic yards of additional material at its sediment disposal facility. The additional material is from the Shell Oil Products Martinez Complex Wharf maintenance dredging. The Martinez Marina sediment disposal facility consists of a series of impoundment ponds which are located adjacent to the Marina on property owned by the City of Martinez.
- 2. These Revised Waste Discharge Requirements (Requirements) supersede and replace Order No. 95-082.
- 3. The Discharger proposes to hydraulically dredge approximately 150,000 cubic yards of sediment from the City of Martinez Marina in three episodes over five years, and 20,000 cubic yards of sediment from the Shell Oil Products Martinez Complex Wharf in one dredging episode, with direct placement of the dredged material into the impoundment ponds. The Discharger will discharge a maximum of one cubic foot per second (cfs) of decant water from this facility. The design flow for the facility is 30 cubic feet per second.
- 4. These requirements are for the discharge of return-flow or decant water from dredge material handling and disposal operations.
- 5. The impoundment ponds are located adjacent to the Carquinez Strait and the discharge from the facility will be into the Carquinez Strait.
- 6. The existing and potential beneficial uses for groundwater in the vicinity of the site include municipal and domestic water supply, industrial process water supply, industrial service water supply and agricultural water supply. The beneficial uses of the waters of the Carquinez Strait as set forth in the Basin Plan are as follows:
  - a. Water Contact Recreation.
  - b. Non-Contact Water Recreation
  - c. Wildlife Habitat
  - d. Industrial Service Supply
  - e. Preservation of Rare and Endangered Species
  - f. Fish Migration and Spawning
  - g. Navigation
  - h Fish Spawning
  - i. Estuarine Habitat
  - j. Ocean Commercial and Sport Fishing

age 2

- 7. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on December 17, 1986. The Basin Plan identifies beneficial uses and water quality objectives for surface and ground waters in the region, as well as discharge prohibitions intended to protect beneficial uses.
- 8. Effluent limitations in these requirements are based on the plans, policies, and water quality objectives of the Basin Plan, *Quality Criteria for Water* (EPA440/5-86-001, 1986; Gold Book), Applicable Federal Regulations (40 CFR Parts 122 and 131), the National Toxics Rule (57 FR 60848, 22 December, 1992; NTR), and Best Professional Judgment.
- 9. The action to adopt waste discharge requirements for this facility is exempt from the provisions of the California Environmental Quality Act (CEQA), in accordance with Section 15301, Title 14, California Administrative Code.
- 10. The Regional Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge.
- 11. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.
- 12. IT IS HEREBY ORDERED that the City of Martinez, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

#### A. <u>Discharge Prohibitions</u>:

- 1. The direct discharge of wastes (including dredged sediment material) to surface waters or surface water drainage courses is prohibited.
- 2. The discharge shall not cause degradation of any water supply.
- 3. The dredged material shall remain within the designated disposal area at all times.
- 4. The dredge and disposal activities subject to these requirements shall not cause a nuisance as defined in Section 13050(m) of the California Water Code.

#### B. Specifications

1. At no point within a containment area or cell shall the elevation of sediment exceed that of the levees, berms or other containment structures.

#### C. <u>Effluent Limitations</u>

Wastewater (decant water, return water) discharged at the control weir shall not exceed the following limits at any time:

Table 1. Effluent Limitations

| Constituent               | Instantaneous Maximum<br>Limit (ppb) | Basis for Limitation |
|---------------------------|--------------------------------------|----------------------|
| Arsenic                   | 20                                   | Basin Plan           |
| Cadmium                   | 10                                   | Basin Plan           |
| Chromium(VI) <sup>1</sup> | 11                                   | Basin Plan           |
| Copper                    | 20                                   | Basin Plan           |
| Cyanide                   | 25                                   | Basin Plan           |
| Lead                      | 5.6                                  | Basin Plan           |
| Mercury                   | 1                                    | Basin Plan           |
| Nickel                    | 7.1                                  | Basin Plan           |
| Silver                    | 2.3                                  | Basin Plan           |
| Zinc                      | 58                                   | Basin Plan           |
| Total Suspended Sediment  | 100 ppm                              | Best Professional    |
|                           |                                      | Judgment             |
| Dissolved Sulfide         | 100                                  | Best Professional    |
| · .                       |                                      | Judgment             |
| pН                        | 6.5 - 8.5                            | Basin Plan           |

<sup>1</sup> The Discharger may, at its option, meet this limit as total chromium (Basin Plan - 1986 Basin Plan Table IV-1).

ppb = parts per billion

ppm = parts per million

#### D. Receiving Water Limitations

- 1. The dredging and/or disposal of waste (i.e., sediments and/or decant water) shall not cause:
- a. Floating, suspended or deposited macroscopic particulate matter or foam in waters of the State at any place more than 100 feet from the dredge or point of discharge of the return flow.
- b. Bottom deposits or aquatic growth in waters of the State at any place.
- c. Alteration of apparent color beyond present natural background levels in waters of the State at any place more than 100 feet from the dredge or point of discharge of the return flow.
- d. Visible floating, suspended, or deposited oil or other products of petroleum origin in waters of the State at any place.
- e. Waters of the State to exceed the following quality limits at any point:
  - i) Dissolved Oxygen:
    - 5.0 mg/l minimum. When natural factors cause lesser concentrations, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
  - ii) Dissolved Sulfide
    - 0.1 mg/l maximum.

iii) pH:

A variation of natural ambient pH by more than 0.2 pH units.

iv) Toxic or other deleterious substances:

None shall be present in concentrations or quantities which may cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.

2. Turbidity of the waters of the State, as measured in NTUs, at any point beyond the 100 feet of the discharge of the return flow shall not increase above background levels by more than the following:

#### Receiving Waters Background

#### **Incremental Increase**

<50 units 50-100 units >100 units 5 units, maximum 10 units, maximum 10% of background, maximum

3. The groundwater shall not be degraded as a result of the sediment disposal and handling operation.

#### E. PROVISIONS

- 1. The discharge of silt, sand, soil, clay or other earthen materials from dredging, construction or any other on-shore operation in quantities sufficient to cause deleterious bottom deposits or turbidity or discoloration in excess of natural background levels in surface waters is prohibited.
- 2. Dredging operations shall cease immediately whenever violations of these Requirements are detected through implementation of the Self-Monitoring Program (SMP) and operations shall not resume until alternative methods of compliance are provided. The Discharger shall notify the Regional Board immediately whenever violations are detected and operations shall not resume until the Executive Officer of the Regional Board has approved the corrective action plan that will provide alternative methods of compliance.
- 3. The Discharger shall file with the Regional Board quarterly self-monitoring reports performed according to any Self-Monitoring Program issued by the Executive Officer.
- 4. Dust and odor from the dredged sediment disposal operations shall not cause a nuisance beyond the property boundary.
- 5. All reports pursuant to these Provisions shall be prepared under the supervision of a registered civil engineer or certified engineering geologist.
- 6. The Discharger shall ensure that if the facility sustains any earthquake damage, the Discharger will work diligently to repair such damage and remove any threat to water quality that might exist as a consequence of the damage.
- 7. The Discharger shall install any additional leachate monitoring devices required to fulfill the terms of any Self-Monitoring Program issued to the Discharger in order that the Regional Board may evaluate compliance with the conditions of this order.

- 8. The discharge of any hazardous, designated or non-hazardous waste as defined in Title 23, Division 3, Chapter 15 of the California Administrative Code, to the disposal site is prohibited. Only dredged material that has been demonstrated to be non-hazardous may be discharged to the disposal site.
- 9. The Discharger shall remove and relocate any wastes which are discharged at this site in violation of these Requirements.
- 10. The Discharger shall file with the Regional Board a report of any material change or proposed change in the character, location, or quantity of this waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries of the disposal areas or the ownership of the site.
- 11. Each dredging and disposal episode shall be approved by the Regional Board Executive Officer prior to the commencement of dredging for that episode.
- 12. At least 30 days prior to each dredging episode, the Discharger shall submit to the Regional Board a report of the chemical and physical analysis of the proposed dredge material. The sampling and analysis should be consistent with Public Notice 93-2 ("Testing Guidelines for Dredged Material Disposal at San Francisco Bay Sites") Table 1 and Table 3 guidelines or any subsequent modification(s) thereof. A modified Waste Extraction Test (WET), as described in Title 22, California Code of Regulations, Section 66700, shall also be required. The modification, substituting deionized water for the sodium citrate buffer, is detailed in Section 66700(e).
- 13. The Discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.
- 14. The property owner and site operator is considered to have full responsibility for correcting any and all problems which arise in the event of a failure which results in an unauthorized release of waste or wastewater.
- 15. The Discharger shall maintain all devices or designed features installed in accordance with this Order such that they function without interruption for the life of the operation.
- 16. The ultimate off-site disposal of the dried dredge material is subject to the approval of the Executive Officer. This approval shall be based upon a demonstration that the ultimate disposal will occur at a site which has Waste Discharge Requirements (WDRs) from this Regional Board or a site that has received a waiver of WDRs.
- 17. The Discharger shall permit the Regional Board or its authorized representative, upon presentation of credentials:
  - a. Entry on to the premises on which wastes are located or in which records are kept.
  - b. Access to copy any records required to be kept under the terms and conditions of this Order.
  - c. Inspection of any treatment equipment, monitoring equipment. or monitoring method required by this Order.
  - d. Sampling of any discharge or surface water covered by this Order.

- 18. The Discharger shall comply with all applicable items of the attached "Standard Conditions and Reporting Requirements for Non-NPDES Wastewater Discharge Permits" dated August, 1993.
- 19. These Requirements do not authorize commission of any act causing injury to the property of another or of the public; do not convey any property rights; do not remove liability under federal, state or local laws, regulations or rules of other programs and agencies nor do these Requirements authorize the discharge of wastes without appropriate permits from other agencies or organizations.
- 20. The Discharger may request, subject to Executive Officer approval, that additional dredged material be disposed at this facility, provided that the facility design capacity is not exceeded and the material meets all applicable suitability requirements.
- I, Stephen I. Morse, Acting Executive Officer, do hereby certify that the foregoing is a full, complete and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on August 23, 1995.

STEPHEN I. MORSE

ACTING EXECUTIVE OFFICER

#### Attachments:

A: Self-Monitoring Program (SMP)

C: Site Map

B: Standard Provisions and Reporting Requirements

D: Not Used

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

#### **SELF-MONITORING PROGRAM**

**FOR** 

# CITY OF MARTINEZ - MARTINEZ MARINA MAINTENANCE DREDGING SEDIMENT DISPOSAL SITE

### MARTINEZ, CONTRA COSTA COUNTY

**ORDER NO. 95-176** 

**CONSISTS OF** 

PART A (5 Pages)

**AND** 

PART B (3 Pages)

#### A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No.73-16. This Self-Monitoring Program is issued in accordance with Provision 3 of Regional Board Order No. 95-176.

The principal purposes of a Self-Monitoring Program are:

- 1. to document compliance with waste discharge requirements and prohibitions established by the Board,
- 2. to facilitate self-policing by the waste discharges in the prevention and abatement of pollution arising from waste discharge,
- 3. to develop or assist in the development of standards of performance, and toxicity standards,
- 4. as appropriate, to assist the Discharges in complying with the requirements of Article 5, Chapter 15 as revised July 1, 1991.

#### B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the most recent version of EPA Standard Methods and in accordance with an approved sampling and analysis plan.

Water and waste analysis shall be performed by a laboratory approved for these analyses by the State of California. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

#### C. **DEFINITION OF TERMS**

- 1. A grab sample is a discrete sample collected at any time.
- 2. Receiving waters refers to any surface water which actually or potentially receives surface or groundwater which pass over, through, or under waste materials or dredged sediment.
- 3. Standard Observations refers to the following information:
  - a. Receiving Waters:
    - i. Floating and suspended materials of waste origin: presence or absence, source, and size of affected area.
    - ii. Discoloration and turbidity: description of color, source, and size of affected area.
    - iii. Evidence of odors, presence or absence, characterization, source, and distance of travel from source.

- b. Perimeter of the sediment containment(impoundment ponds) facility:
  - i. Evidence of liquid leaving or entering the containment area at any point except designated discharge point, estimated size of affected area and flow rate (Indicate affected area on map).
  - ii. Evidence of odors or dust, presence or absence, characterization, source, and distance of travel from source.
  - iii. Evidence of erosion of earthen berm(s) or levees.
  - iv. Evidence of any excessive settlement of the facility.
- 4. Operations Monitoring refers to the following information:
  - 1. Estimates of the daily volume, in gallons, of return water generated from the dewatering of the dredged material.

#### D. RECORDS TO BE MAINTAINED

Written reports shall be maintained by the Discharger or laboratory, and shall be retained for a minimum of five years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Board. Such records shall show the following for each sample:

- 1. Identity of sample and sample station number.
- 2. Date and time of sampling.
- 3. Date and time that analyses are started and completed, and name of the personnel performing the analyses.
- 4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used.
- 5. Calculation of results.
- 6. Results of analyses, and detection limits for each analysis.

#### E. REPORTS TO BE FILED WITH THE BOARD

- 1. Written monitoring reports shall be filed according to the schedule set forth in Table A 2. The reports shall contain the following:
  - a. Letter of Transmittal

A letter transmitting the essential points in each report should accompany each report. Such a letter shall include a discussion of any requirement violations found during the last report period, and actions taken or planned for correcting the violations. If the Discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred in the last report period this shall be stated in the letter of transmittal. Monitoring reports and the letter transmitting the monitoring reports shall be signed by a principal executive officer at the level of vice president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the

discharge originates. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct.

- b. Each monitoring report shall include a compliance evaluation summary. The summary shall contain:
  - i. An estimation of the volume of the facility discharge on a daily, weekly and monthly basis.
  - ii. The method and time of measurement, equipment and methods used to monitor field pH, temperature, Total Suspended Solids (TSS), dissolved oxygen (D.O.) and conductivity, results of the pH, temperature, TSS, D.O. and conductivity testing.
- c. A map or aerial photograph shall accompany each report showing observation and monitoring station locations.
- d. Laboratory statements of results of analyses specified in Part B must be included in each report, if appropriate. The director of the laboratory whose name appears on the laboratory certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Board.
  - i. The methods of analyses and detection limits must be appropriate for the expected concentrations. Specific methods of analyses must be identified. If methods other than EPA approved methods or Standard Methods are used, the exact methodology must be submitted for review and approved by the Executive Officer prior to use.
  - ii. In addition to the results of the analyses, laboratory quality assurance/quality control (QA/QC) information must be included in the monitoring report. The laboratory QA/QC information should include the method, equipment and analytical detection limits; the recovery rates; an explanation for any recovery rate that is less than 80%; the results of equipment and method blanks; the results of spiked and surrogate samples; the frequency of quality control analysis; and the name and qualifications of the person(s) performing the analyses.
- e. A summary and certification of completion of all Standard Observations for the facility including the receiving waters, the perimeter of the containment facility, and facility foundation.
- f. A summary and certification of completion of all Operations Monitoring information.

#### 2. **CONTINGENCY REPORTING**

a. A report to the Executive Officer shall be made by telephone of any accidental discharge of whatever origin from the containment facility immediately after it is discovered. A written report shall be filed with the Board within five days thereafter. This report shall contain the following information:

- i. a map showing the location(s) of discharge(s);
- ii. approximate flow rate;
- iii. nature of effects; i.e. all pertinent observations and analyses; and
- iv. corrective measures underway or proposed.
- b. If any effluent limit is exceeded, within 24 hours of receiving the analytical results indicating the violation, a confirmation sample shall be taken and analyzed with 24 hour turn-around time. If the limit is violated in the second sample, the Discharger shall notify Regional Board staff immediately. The Executive Officer may order the discharge to be terminated, on a case-by-case basis.

#### 3. FINAL REPORTING

The Discharger shall notify the Regional Board by letter upon completion of the project. Project completion is considered to be the date on which all dredged material has been deposited at its final disposal location(s). The Discharger shall also submit a final report containing the following information:

- a. A comprehensive discussion of the compliance record, and the corrective actions taken or planned which were needed for compliance with the waste discharge requirements.
- b. An estimate of the total volume of dredge material removed.
- c. An estimate of the total volume of decant water generated from dewatering of the dredged material.

#### Part B

#### CITY OF MARTINEZ - MARTINEZ MARINA MAINTENANCE DREDGING SEDIMENT DISPOSAL SITE

#### I. DESCRIPTION OF MONITORING STATION

#### A. <u>EFFLUENT</u>

E-1 At the point of the facility discharge system immediately after discharge from the final weir.

#### II. SCHEDULE OF SAMPLING AND ANALYSIS

The schedule of sampling and analysis is provided in the attached Tables A-1 and A-2.

The Regional Board or Executive Officer may approve an alternative sampling plan if it is demonstrated that expected operating conditions warrant a deviation from the standard sampling plan.

#### III. REPORTING SCHEDULE

Reports submitted in compliance with this Self-Monitoring Program shall be submitted on the following on the following bases:

Quarterly Reporting - quarterly reports shall be submitted during all dredging, fill placement and decanting operations. Quarterly reports shall be submitted by the 15th day of the month following the reporting period, beginning with the first month of dredging. Quarterly reports shall include the measurements, observations and monitoring as enumerated in Table A-1 and A-2.

Final Reporting - The Discharger shall notify the Regional Board by letter upon completion of the project. Project completion is considered to be the date on which all dredged material has been deposited at its final disposal location(s). The Discharger shall also submit a final report within 60 days of the project completion date.

All reports shall be submitted to:

Executive Officer California Regional Water Quality Control Board San Francisco Bay Region 2101 Webster Street, Suite 500 Oakland, CA 94612

I, Stephen I. Morse, Acting Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 95-176.

- 2. Was adopted by the Board on August 23, 1995
- 3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the Discharger, and revisions will be ordered by the Executive Officer or the Board.

Stephen I. Morse

Acting Executive Officer

Attachments: Table A-1 and A-2: Schedule for Sampling, Measurements and Analysis

### SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

# CITY OF MARTINEZ - MARTINEZ MARINA MAINTENANCE DREDGING SEDIMENT DISPOSAL SITE

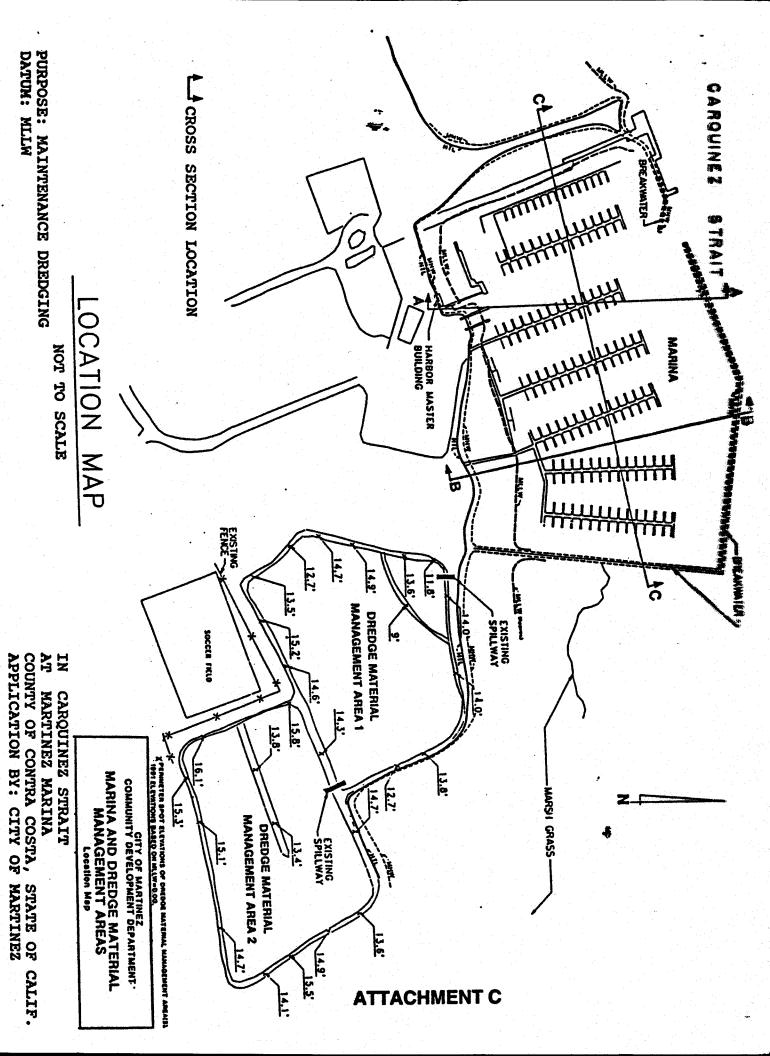
Table A-1

| Sampling Station ->       | E-1               |                  |
|---------------------------|-------------------|------------------|
| Sample Type ->            | Grab              |                  |
|                           | Frequency         | Reporting Period |
| Total Suspended<br>Solids | Daily/episode     | Quarterly        |
| Turbidity (NTUs) field    | Daily/episode     | Quarterly        |
| pH (units) field          | Daily/episode     | Quarterly        |
| Dissolved Oxygen          | Weekly/episode    | Quarterly        |
| Dissolved Sulfide         | Weekly/episode    | Quarterly        |
| Temperature               | Weekly/episode    | Quarterly        |
| Metals (Table 1.)         | Quarterly/episode | Quarterly        |

#### TABLE A-2

### Report Submission schedule:

|                              | Frequency    | Reporting Period | Report Due Date                          |
|------------------------------|--------------|------------------|--|
| Standard Observations        | Daily        | Quarterly        | 15th of Month Following Reporting Period |
| Operations Monitoring        | Daily        | Quarterly        | 15th of Month Following Reporting Period |
| Table A-1 Parameters         | As indicated | Quarterly        | 15th of Month Following Reporting Period |
| Project Completion<br>Notice | One Time     | N/A              | Upon Completion of Project               |
| Final Report                 | One Time     | Project Duration | 60 Days After<br>Completion of Project   |



SHEET 2 OF

DATE: JULY 1994